



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,693	08/14/2001	Kuocheng Wu	FAM 137	8076

7590 01/26/2005

RABIN & CHAMPAGNE, P.C.
Suite 500
1101 14th Street, N.W.
Washington, DC 20005

EXAMINER

HO, TUAN V

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/928,693

Applicant(s)

WU ET AL.

Examiner

Tuan V Ho

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-44 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-17, 21-29 is/are rejected.
- 7) ☒ Claim(s) 5,6,18-20 and 30-32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2615

1. It is noted that the present Office action responds to claims 9-44 of the preliminary filed on 9/23/02. The last Office action did not cover the claims mistakenly.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. Claim 33 is objected to because of the following informalities: the term "wherein in" in claim 33 should be read as "wherein". Appropriate correction is required.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2615

Claims 1, 3, 8, 9, 10, 11, 14, 15, 16, 17, 21, 22, 23, 26-29, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammack et al (US 6,088,053).

With regard to claim 1, Hammack et al discloses in Fig. 2, digital record and replay binoculars that comprises the two body tubes (monocular components 12a and 12b inherently includes objective lenses, col. 3, lines 23-24), eyepiece (eyepieces 18, col. 3, line 25), prism (a prism disposed between the objective lens and the eyepiece is inherently in monocular elements 12a or 12b since the prism is used to bend light rays in according a desired directions so as to shorten the length of the monocular elements), digital image storage unit (digital video camera 15 comprises circuit board 44 including a processing system, where the system comprises PC card 42 located inside the camera; noted that video camera 15 is disposed between the tubes 12a and 12b, col. 3, line 15 and line 66), image sensor (image processor 48 inherently includes an image sensor so as to provide image signal to signal processor 50, col. 4, lines 21-33), shutter key (record button 30, col. 3, line 53), driver and microprocessor (driver is inherent in the image processor 48 since it is used to drive the sensor and readout image signals and microprocessor 46 compresses image data and stores in video cache RAM 46 and PC card 42, col. 4, lines 28-37), parallel optical axis (video

Art Unit: 2615

camera 15 has lens 21 including an optical axis that is parallel to two monocular elements 12a and 12b as shown in Fig. 2; thereby the camera can take an image observed by a user with binoculars 12).

With regard to claim 3, Hammack et al discloses in Fig. 2, digital record and replay binoculars that comprises the image taken is output to a personal computer via a universal serial bus (Hammack et al discloses that the camera is connected to a personal computer, col. 6, lines 32-34; noted that a universal serial bus is inherent in a personal computer so as to transfer image data with a high speed).

With regard to claim 8, Hammack discloses the rectangular field of view to be substantially a rectangular field of view having ratio 4:3 (digital video camera 15 of Hammack et al inherently captures an object image in a rectangular field of view and of course transmits the rectangular image to computer in order to display the image in rectangular field of view, col. 6, lines 32-37).

With regard to claim 9, Hammack et al discloses in Fig. 2, digital record and replay binoculars functioning as a binocular telescope (col. 3, line 32), that comprises the first and second object lenses each having a focal length for focusing on objects at mid range (objective lenses of binocular 12 are inherently

Art Unit: 2615

included focal length so as to focus objects; noted that the focal length for focusing on objects includes long range and mid range in order to focus objects at long and short distances), and image sensor located along a second optical axis (video camera 15 has camera lens 21 that is located along an optical axis parallel to the binocular so as receive the same object image as of the binocular, col. 3, line 35).

With regard to claim 10, Hammack et al discloses in Fig. 2, digital record and replay binoculars functioning as a binocular telescope (col. 3, line 32), that comprises the memory (PC card 42, col. 4, line 35).

With regard to claim 11, Hammack et al discloses in Fig. 2, digital record and replay binoculars functioning as a binocular telescope (col. 3, line 32), that comprises the flash memory (PC card 42 is a flash memory card).

Claims 14 and 15 recite what was discussed with respect to claim 3.

With regard to claims 16 and 17, Hammack et al discloses the display panel (LCD 16, col. 3, line 54).

Method claims 21-23 and 28-29 correspond to apparatus claims 9-11 and 16-17 and are analyzed the same as previously discussed with respect to claims 21-23 and 16-17.

Art Unit: 2615

With regard to claim 33 and 34, Hammack discloses the field of view to be substantially a rectangular field of view and to be provided to a personal computer in a rectangular field of view (digital video camera 15 of Hammack et al inherently captures an object image in a rectangular field of view and of course transmits the rectangular image to computer in order to display the image in rectangular field of view, col. 6, lines 32-37).

With regard to claims 26 and 27, claims 26 and 27 recite what was discussed with respect to claim 3.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2615

Claims 2, 4, 7, 12, 13, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammack et al in view of Fukuoka (US 5,754,227).

With regard to claim 2, Hammack et al discloses the same subject matter as discussed with respect to claim 1, except that the audio signal processing system including a microphone, D/A converter and compressed audio signal.

Hammack et al does not explicitly disclose any microphone, A/D converter and compressed audio signal; however, Fukuoka teaches using an electronic camera; where the camera comprises a microphone, A/D converter and audio data compression circuit so as to generate compressed digital audio signals and store in a memory card in order to maximized the storage space of memory card 9, col. 4, lines 54-67 and col. 5, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the audio processing system of Fukuoka in video camera 15 of Hammack et al in order to obtain compressed audio signals that is stored in PC card 42. That is because the implementation of the audio processing system of Fukuoka in the video camera of Hammack et al would allow a user to store audio signals in

Art Unit: 2615

accordance with video signals in the PC card and thereby to provide more details of an object image in for future uses.

With regard to claim 4, Hammack et al discloses the same subject matter as discussed with respect to claims 1 and 2, except that the image and audio signal received by the digital image storage unit are output to a personal computer.

In the combination of Hammack et al and Fukuoka the camera 15 is able to record video and audio signals. Thus, there is inherently included a circuit that can transfer the audio and video signals to the personal computer.

With regard to claim 7, Hammack et al discloses the same subject matter as discussed with respect to claim 1, except that the mid-range scene about 50 to 200 meters, plastic lens, magnification power 5X to 8X, aperture within range from 15-25mm, ratio of field of view 4:3, diagonal view angle within the range from 5-7 degrees.

Official Notice is taken for the mid-range scene about 50 to 200 meters, plastic lens, magnification power 5X to 8X, aperture within range from 15-25mm, ratio of field of view 4:3, and diagonal view angle within the range from 5-7 degrees.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the binocular system of Hammack et al in view of Fukuoka so as

Art Unit: 2615

to have the binocular system that includes the mid-range scene about 50 to 200 meters, plastic lens, magnification power 5X to 8X, aperture within range from 15-25mm, ratio of field of view 4:3, diagonal view angle within the range from 5-7 degrees. That is because the modification of the Hammack and Fukuoka binocular system would allow a user to operate a binocular system and record video images under standard system and thereby to easily to transfer data to a computer and less expensive to fabricate.

Claims 12 and 13 recite what was discussed with respect to claims 2 and 4.

Claim 15 recites what was discussed with respect to claim 4.

Method claims 24 and 25 recite what was discussed with respect to claims 2 and 4.

6. Claims 5, 6, 18, 19, 20, 30, 31 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 35-44 are allowed.

The prior art of record fails to suggest or disclose:

With regard to claim 35, a binocular telescope comprising a display panel coupled to said digital image storage unit, said display panel to display said image from said image sensor of said digital image storage unit; and a semitransparent reflective element oriented along said first optical axis, where said image displayed on said display panel is viewable through at least one of said first and second eyepieces by orienting said display panel substantially perpendicular to said first optical axis, and directing said image as displayed by said display panel towards said at least one of said first and second eyepieces using said reflective element in combination with other elements in the claim.

With regard to claim 40, a method of viewing an image having a field of view, comprising capturing the image, said image having a second field of view substantially the same as said first field of view, through an image sensor located in a digital image storage unit, said digital image storage unit being located between said first and second body tubes, said second optical axis being separate from said first optical axis; displaying said image from said image sensor on a display panel; and orienting a semitransparent reflective element along said first optical axis, orienting said display panel substantially

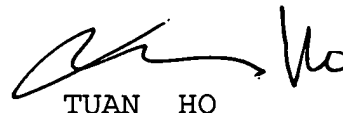
Art Unit: 2615

perpendicular to said first optical axis, directing said image displayed on said display panel towards at least one of said first and second eyepieces using said reflective element in combination with the other steps.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN HO whose telephone number is (703) 305-4943. The examiner can normally be reached on Mon-Fri from 7AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen, can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



TUAN HO

Primary Examiner

Art Unit 2615